PATENT

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Application No.: 09/499,238

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Applicant: Gregory A. Stobbs, et al.

Group Art Unit: 2741

Examiner: Leslie Wong

Title: COMPUTER-IMPLEMENTED PATENT PORTFOLIO

ANALYSIS METHOD AND APPARATUS

Attorney Docket: 9305-000002/US

Director of U.S. Patents and Trademarks

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APPEAL BRIEF

Sir:

Applicants hereby submit this Appeal Brief and include the fee for the Appeal Brief.

TABLE OF CONTENTS

1.	Real Parties in Interest	1
II.	Related Appeals and Interferences	2
III.	Status of Claims	3
IV.	Status of Amendments	4
٧.	Summary of Claimed Subject Matter	5
VI.	Grounds of Rejection to be Reviewed on Appeal	1:
VII.	Argument	1
VIII.	Claims Appendix	2
IX.	Evidence Appendix	3
X.	Related Proceedings Appendix	34

I. REAL PARTIES IN INTEREST

The real parties in interest are the applicants, Gregory A. Stobbs and John V. Biernacki.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals and/or interferences currently pending that are known to appellants, and/or appellant's legal representative which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal. However, there is currently pending an appeal to the Board of Patent Appeals and Interferences in applicants' divisional application, serial number 10/806,307. That appeal was filed January 21, 2008, and is still pending.

For completeness, appellants would also note that there have been two prior appeals in the present application (both were disposed of). The first appeal was taken on May 14, 2003, and was disposed of by the examiner's withdrawal of finality, mailed January 13, 2004 (paper No. 13); the second appeal was taken on May 4, 2005, and was disposed of by the examiner's withdrawal of finality and stating new grounds of rejection, mailed September 23, 2005.

III. STATUS OF CLAIMS

Claims 1-7, 11-22, 31 and 32 are pending in the application. Claims 8-10, 23, 24 and 26-30 are withdrawn from consideration in this application and are currently being prosecuted in a co-pending divisional application.

Claims 1-2, 4-7, 11-12, 14-16, 18-22 and 31-32 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Snyder et al. ("Snyder") (U.S. Patent 6,038,561) in view of Risen, Jr. et al. ("Risen") (U.S. Patent 6,018,714) and Petruzzi et al ("Petruzzi") (U.S. Patent 6,049,811).

Identity of appealed claims:

Claims 1-2, 4-7, 11-12, 14-16, 18-22 and 31-32 are being appealed.

IV. STATUS OF AMENDMENTS

There have been no amendments filed subsequent to the final rejection, mailed September 15, 2008.

V. SUMMARY OF CLAIMED SUBJECT MATTER

This application currently contains four independent claims under consideration, setting forth four inventions that will be summarized here, with reference to the specification and drawings. The application also contains other claims that have been withdrawn from consideration, without prejudice, in response to a restriction requirement. The references to the specification and drawings made here are intended to be representative, and not an exhaustive listing of all possible references that could be made.

Concise summary of independent claim 1

1. Automatic determination of claim breadth metric for multiple claims retrieved from a plurality of patents. (See, e.g., claim 1)

According to this aspect of the invention, the following three steps are performed:

(1) retrieving a corpus of patent information from a database, said patent information including multiple claims from a plurality of patent documents.

In the Applicants' specification refer, for example, to Figure 3, which shows a relational database structure including the "All Patents Table" 60 into which the retrieved corpus of patent information is stored. Figure 3 also shows a "Claims" table 62 into which the Claim Text is stored. As illustrated, table 62 has a relationship to the All Patents Table 60. This relational database structure and its use in retrieving a corpus of patent information is described, for example, in Applicants' specification beginning at page 9, line 3 through page 10, line 8.

(2) automatically determining claim breadth metrics for the multiple claims.

In Applicants' specification the automatic determination of claim breadth metrics is described, for example, beginning at page 11, line 9 (which refers to Figure 4) through page 13, line 7. As described, the text of the claims may be scanned to separate independent claims from dependent claims, and the independent claims are then analyzed by a word count algorithm capable of giving claim preamble a different weight than the claim body. Other linguistic analysis can also be performed.

(3) associating a claim breadth metric with a claim and storing said associated claim breadth metric in a computer-readable dataset, wherein a claim breadth metric which is associated with a claim is indicative of how broad the claim is.

In Applicants' specification, the storage claim breadth metric data is illustrated in Figure 3. Specifically, the Claims table 62 stores "claim word count," "claim length," and "adjusted claim word count" (all claim breadth metrics that are automatically determined based on step (b) above).

Concise summary of independent claim 11

Method of automatically analyzing the text of multiple claims from plural patent documents using claim breadth metrics. (See, e.g., claim 11)

According to this aspect of the invention, the following two steps are performed:

(1) retrieving text of multiple claims from a computer-implemented data store, wherein the text of claims are from a plurality of patent documents. In the Applicants' specification refer for example to Figure 3, which shows a relational database structure including the "All Patents Table" 60 into which the retrieved corpus of patent information is stored. Figure 3 also shows a "Claims" table 62 into which the Claim Text is stored. As illustrated, table 62 has a relationship to the All Patents Table 60. This relational database structure and its use in retrieving a corpus of patent information is described, for example, in Applicants' specification beginning at page 9, line 3 through page 10, line 8.

(2) automatically analyzing the text of the claims in order to generate claim breadth metrics for the claims, wherein a claim breadth metric that is associated with a claim is indicative of how broad the claim is, wherein the claim breadth metrics are used to analyze the multiple claims.

In Applicants' specification the automatic determination of claim breadth metrics is described, for example, beginning at page 11, line 9 (which refers to Figure 4) through page 13, line 7. As described, the text of the claims may be scanned to separate independent claims from dependent claims, and the independent claims are then analyzed by a word count algorithm capable of giving claim preamble a different weight than the claim body. Other linguistic analysis can also be performed.

Discussion of how the claim breadth metrics may be used to analyze the multiple claims appears, for example, at page 3, beginning at line 1.

Concise summary of independent claim 31

3. Patent portfolio analysis apparatus where claim breadth metrics and category metrics are provided over an internet network. (See. e.g., claim 31)

According to this aspect of the invention, the portfolio analysis apparatus includes the following two modules:

(1) a claim breadth analysis module that automatically analyzes the text of claims in order to generate claim breadth metrics for the claims.

The Applicants' specification describes the claim breadth analysis module may be implemented as illustrated, for example in Figure 8 as the claim breadth analysis engine 152. The claim breadth analysis engine 152 is implemented within or called by the patent portfolio analysis engine 150.

(2) a cluster generator that analyzes patent information to generate category metrics for the patent documents.

In Applicant's specification, the cluster generator also forms part of, or is called by, the patent portfolio analysis engine 150 (Figure 8).

Both claim breadth metrics and category metrics are provided over an internet network for use in analyzing the patent documents. This is illustrated, for example, in Applicants' Figure 1.

Concise summary of independent claim 32

4. Patent portfolio analysis method that automatically analyzes claim text of a plurality of claims to generate an individual claim breadth metric with each of the plurality of claims. (See, e.g., claim 32)

According to this aspect of the invention, the portfolio analysis method includes the following two steps:

(1) retrieving a corpus of patent information from a database, said patent information including the claim text of a plurality of claims.

In the Applicants' specification refer for example to Figure 3, which shows a relational database structure including the "All Patents Table" 60 into which the retrieved corpus of patent information is stored. Figure 3 also shows a "Claims" table 62 into which the Claim Text is stored. As illustrated, table 62 has a relationship to the All Patents Table 60. This relational database structure and its use in retrieving a corpus of patent information is described, for example, in Applicants' specification beginning at page 9, line 3 through page 10, line 8.

(2) automatically analyzing the claim text of said plurality of claims to generate and associate an individual claim breadth metric with each of said plurality of claims.

In Applicants' specification the automatic determination of claim breadth metrics is described, for example, beginning at page 11, line 9 (which refers to Figure 4) through page 13, line 7. As described, the text of the claims may be scanned to separate independent claims from dependent claims, and the independent claims are then analyzed by a word count algorithm capable of giving claim preamble a different weight than the claim body. Other linguistic analysis can also be performed.

Discussion of how the claim breadth metrics may be used to analyze the multiple claims appears, for example, at page 3, beginning at line 1.

Concise summary of dependent claims

Claims 2 and 12 further recite that automatically determining claim breadth metrics includes automatically counting the number of words in the claim text for each of the multiple claims and generating claim breadth metrics for the multiple claims therefrom. In Applicants' specification this is illustrated in Fig. 4, at 86. See page 12, In. 4 of the specification.

Claim 3 and 13 further recite that automatically determining claim breadth metrics includes automatically identifying within the claim text for each of the multiple claims a preamble and a body portion, counting the number of words in the preamble and body portions and applying separate weights to the counts to generate a claim breadth metric for each of the multiple claims. In Applicants' specification this is described at page 12 beginning at line 7.

Claim 4 and 14 further recite automatically parsing the claim text for each of the multiple claims based on parts of speech, and generating scores indicative of which clauses within the claim text have a lower probability of being found in other claims within the corpus. This is described in Applicants' specification at page 12 beginning at line 10, through about line 25.

Claim 5 and 15 further recite displaying the patent information in a sorted order based on claim breadth metric. In Applicants' specification this is described at page 29, In 10.

Claim 6 and 18 further recite linguistically processing the claim text for each of the multiple claims to identify at least one clause having lower probability of being found in other claims within the corpus. This is described in Applicants' specification at page 12 beginning at line10, through about line 25.

Claim 7 and 19 further recite that the one clause (identified in claim 6) is visually presented differently than the other clauses. This is described in Applicants' specification at page 13 beginning at line 2.

Claims 16 and 17 recite use of the invention in conducting patent infringement study and in making maintenance fee payment decisions. This is described in Applicants' specification at page 26, beginning at about line 16, and at page 28, at about line 24, respectively.

Claims 20, 21 and 22 further recite generating descriptive statistics.

This is described in Applicants' specification in Figures 29 and at page 47 beginning at line 7.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

- Whether Applicants' claims 1-7, 11-22, 31 and 32 have been improperly rejected over the Snyder reference (6,038,561) in view of Risen (6,018,714) and Petruzzi (6,049,811):
- (a) where the Examiner admits that Snyder does not teach the steps of automatically determining claim breadth metrics for multiple claims; associating said claim breadth metric the claim text and storing that associated metric in a computer-readable dataset, where a claim breadth metric associated with a claim is indicative of how broad the claim is:
- (b) where the Applicants' claims recite <u>automatic determination of claim</u>

 <u>breadth metrics for multiple claims</u>, not found in the Risen reference (which relies on a human to assess the claim breadth); and
- (c) where Petruzzi does not supply the missing element of automatically determining claim breadth (Petruzzi teaches automatic checking of patent Abstract to ensure the 250 word length is not exceeded but does not assess claim breadth at all).

GROUPING OF CLAIMS

In this Appeal Brief, Applicants have grouped the claims into four sets in order to better organize the arguments:

- Set 1 Representative claim 1 (the dependent claims of this parent belong to this group);
- Set 2 Representative claim 11 (the dependent claims of this parent belong to this group);

Set 3 - Representative claim 31

Set 4 - Representative claim 32.

Applicants submit that the above sets each represent patentably distinct inventions. However, recognizing the Board's need for judicial economy, Applicants submit that the claims on appeal may be grouped together into single group as follows for purposes of the 37 C.F.R. 1.192(c)(7) "Grouping of Claims" requirement:

Group I – Claims containing recitation of <u>automatic determination of claim</u> breadth metric,

Claims in this group include independent claims 1, 11, 31 and 32.

VII. ARGUMENT

The Examiner had admitted that Snyder does not teach the steps of:

- b) automatically determining claim breadth metrics for the multiple claims:
- c) associating said claim breadth metric with said claim text and storing said associated metric in a computer-readable dataset; and
- d) wherein a claim breadth metric which is associated with a claim is indicative of how broad the claim is. [See Office Action of 5/6/2004, page 3).

The Examiner cites Risen as teaching the step of valuation of the intellectual property asset, based on "the breadth of the claims." [See Office Action of 5/6/2004, page 3-4). However, there is an important component that is lacking from the Risen reference. The Risen reference does not teach the process of automatically determining claim breadth metrics for multiple claims. As will be demonstrated below, Risen relies on a human to assess the claim breadth metric.

Illustrative of the fact that Risen relies on human assessment of metrics—as opposed to automatic determination of them—is the following quote from Risen, col. 14. lines 39-51:

"The relevant parameters are identified for a particular case. The values of some of the parameters can be determined by agreement between the insurance company and the proposed insured. The values of the others are determined by an appropriate evaluation method. The evaluation method could be, for example, one of the methods referred to above, or a method which involves obtaining the opinion of one or more experts in the field. The preferred method is to obtain the opinions from the most experienced available expert for each issue and to obtain

the opinion of two more highly qualified **experts** for those areas where there is reason to consult further or where there is a large financial risk."

To further aid the Board in evaluating the true scope of the Risen reference, Applicants have conducted a "word search" throughout the text of the Risen reference and present below how the word "claim" is used in Risen specification. It is submitted that if Risen did teach "automatically determining" claim breadth metrics, as the Examiner has presumed, then some language discussing the term "claims" would certainly mention "automatic determination of claim breadth." In fact, as the following excerpts show, the Risen reference does not teach automatically determining a claim breadth metric.

Excerpts from Risen reference where the word "claims" appears Excerpt A [col. 9. lines 21-43]

"The second step of valuation of the intellectual property asset is the assignment of a monetary value to the intellectual property asset. For example, if the asset is a patent and if one or more claims of the patent are found to be valid and enforceable in the legal analysis, a value is then assigned to the patent. This value can be based, for example, upon the income and profits generated by the sale or use of the patented technology, the number of years remaining on the term of the patent, the breadth of the patent claims, the nature of the patented technology, the nature of competitive products or processes, etc. One such method is described below in Prophetic Example 2. Other intellectual property assets can be assigned a monetary value in conventional ways by persons who specialize in, or have the skills needed, to value intellectual property. In another embodiment of the invention, the prospective purchaser of the intellectual property asset assigns their own value to the intellectual property, similar to the manner in which the U.S. Post Office allows a customer who purchases insurance for a parcel to select the desired amount of insurance coverage. While this latter valuation technique is simpler, it is likely to be more difficult to use in statistically determining an appropriate insurance premium."

Excerpt A is the text relied upon by the Examiner in the Office Action. Note that in each case, a <u>human</u> assigns the valuation metric (which the reference

says can be breadth of the patent claims). This is a teaching away from Applicants' invention.

The "Prophetic Example 2" referenced in the above excerpt is discussed at col. 13, beginning at line 31, also relies on human valuation. Risen references U.S. Patent No. 5,608,620 as teaching one suitable method for obtaining values of parameters. A copy of this reference has been provided in the accompanying Information Disclosure Statement. That reference describes a technique used by a group of <u>forecasters</u>. The abstract from 5,608,620 is reproduced below:

A method of eliciting an unbiased prediction of an unknown variable value from at least one of a group of forecasters. This method of compensating individual forecasters can be applied to an entire group of forecasters so as to elicit an unbiased collective prediction. The method yields nearly unbiased predictions from risk-averse forecasters whenever at least two forecasters are employed to make the same prediction. The method involves: aggregating the predictions of the forecasters, both with and without the particular prediction of the individual forecaster; computing collective losses for both of the aggregated predictions; calculating the individual forecaster's marginal contribution to predictive accuracy, based on the difference in collective losses; and computing and paying the individual forecaster's compensation as a function of the individual's marginal contribution.

The Prophetic Example 2 also references the "VALMATRIX" method of Trademark and Licensing Associates, Inc. In preparing the response to this Office Action, Applicants conducted an internet search for VALMATRIX and found reference to this technique at:

www.consor.com/valuation/techniques.htm

A printout of the referenced page is included with this response. Applicants are not able to determine the date of the referenced page, hence no date has been provided for this document in Applicants' Information Disclosure Statement.

However, Applicants find nothing in this reference that suggests the automatic determination of claim breadth metrics.

Excerpt B [col. 5, lines 7-10, col. 6, lines 1-10]

"The present invention provides for a sharing of the risk associated with the purchase, sale and/or ownership of intellectual property assets. Furthermore, the legal, technical and financial analysis which is conducted in connection with underwriting an insurance product to cover an intellectual property asset can also serve as a component in a "due diligence" analysis which is conducted in preparation for the purchase or sale of a business or portion of a business. Thus, the invention can provide the directors of a selling or purchasing company with protection against claims that they had incorrectly assessed the intellectual property of a company involved in an asset transfer. Non-limiting examples of situations in which the method and product of the invention would be useful are described below on Table 1."

Excerpt B uses the term "claims" in the context of a "legal claim" or a
"accusation" that an incorrect assessment has been made. This is, of course, not
the same thing as "patent claims."

Excerpt C [col. 8, lines 45-51]

"When the intellectual property asset is a patent, the step of obtaining a "description of at least one intellectual property asset" which is recited in the claims generally entails obtaining a copy of the patent, and, in at least some cases, its file history. For other intellectual property assets, a description of the asset may entail a copy, sample, specimen, prototype, and/or written description of the asset."

Excerpt C further demonstrates that the Risen reference teaches away from Applicants' invention. Here Risen explains that an assessment of an intellectual property asset recited in the "claims" generally entails obtaining a copy of the patent, and, in at least some cases, its <u>file history</u>. There is nothing in the Risen reference to suggest that the file history would be analyzed automatically, thus it is apparent that Risen contemplates that a human would perform the claim

Excerpt D [col. 8, lines 52-64]

"A first party" as this language is used in the claims refers to the owner (or in some cases the licensee) of the intellectual property asset or assets at the time that the asset or assets are valued. "A person with an interest in the first party" can be, for example, one or more of the parties listed in column 2 of Table 1 above, including the first party itself Most frequently, this person will be a corporation which is a potential purchaser or licensee of the intellectual property asset or assets, the directors of the potential purchaser or licensee, as these persons likely have a strong interest in obtaining a thorough analysis of the intellectual property asset or assets which they intend to purchase or licensee.

Excerpt D uses the term "claims" to refer to the claims of the Risen patent itself. This excerpt serves to define the term "a first party" and does not teach automatic claim breadth assessment.

Excerpt E [Table I]

"The directors and/or officers want to insure themselves in the event that current shareholders in Company A claim they sold the company for too low a price because they did not realize the value of the intellectual property. They also want insurance to cover any liability in the event that Company B or its owners claim that the Directors of Company A did not satisfy their due diligence requirement with respect to disclosure of information that could materially impact the value of the company.

In the resale or merger transaction, they want to insure against losses due to purchaser **claims** that they misrepresented the value of the intellectual property of Company A."

As with Excerpt C, Excerpt E deals with claims as meaning "legal claims" or "accusations" that a wrongdoing occurred.

Excerpt F

"The President of Company A wants insurance to cover the possibility that an investment in using the intellectual property covered by a provisional patent application (e.g. in building a plant to use a technology) will not be wasted or devalued because Company A could not obtain a valid patent with substantially the same claims.

The financiers (bankers, etc.) of Company A wants Company A to have insurance to cover the possibility that an investment in using the intellectual property covered by a provisional patent application (e.g. building a plant to use a technology) will not be wasted or devalued because Company A could not obtain a valid patent with substantially the same claims".

Excerpt F refers to the "claims" in the context of a provisional patent application. As the Examiner knows, the "claims" of provisional applications are not examined. Thus, this excerpt is referring to the situation where Company A has a provisional patent application with claims, and may later file a regular application based on the provisional. In the described scenario the claims in the provisional may not be allowed in "substantially the same" form as filed. (Thus Company A will not be able to get a valid patent with "substantially the same claims" as they had in their provisional application.) To answer this question would require an assessment of the claims vis-à-vis the prior art. By every indication in the Risen reference, this assessment would be done by a human.

Petruzzi Does Not Teach Automatic Assessing of Claim Breadth

Although the Examiner now concedes that neither Risen nor Snyder teach

the step of "automatically determining claim breadth," the Examiner now supports her rejection by adding the teachings of Petruzzi (6,049,811). Petruzzi, however, does not teach automatically determining claim breadth. Rather Petruzzi teaches a machine for drafting a patent application, where the computer performs a word count upon the Abstract, to remind the user when the Abstract exceeds the maximum of 250 words. The Board will of course recognize that measuring the length of the Abstract is not performing an automatic determination of claim breadth.

With regard to any focus upon the claim language, Petruzzi is merely providing the user with guidance (template) regarding the sentence-structure mechanics of drafting a claim, and not regarding claim breadth:

Upon continuing to the next section, the computer 10 causes to be displayed at display 12 introductory material, primarily textual in nature, regarding the Claims 100 section of a patent application. After reading the introductory material, the computer displays a drafting screen 200 for the claims 100. Further, and in accordance with another aspect of the invention, the computer causes to be displayed at drafting area 290 first draft independent claims for the invention, one for each class of invention the operator chose and 20 the computer 10 stored at the Title 60 section. In the preferred embodiment, the first draft claim(s) is (are) created by presenting a portion of the title relating to each class of invention from the Title 60 section followed by the word(s) "comprising" for a machine, article of manufacture, or composition of matter, or "comprising the steps" for a process followed by the PE 94 list, with a semicolon (;), separating each element in the list, except that a semicolon (;) and the word "and" separates the last two elements in the PE 94 list. A period follows the last element in the PE 94 list. Each independent claim generated is assigned a separate alphabetical designation, e.g., the first independent claim is labeled A1 (which will have corresponding dependent claims

A2, A3, A4, etc., if appropriate), the second independent claim is labeled B1 (which will have dependent claims B2, B3, B4, etc., if appropriate), etc. [Petruzzi, col. 12, lns 34-58]

APPLICANTS' CLAIMS ARE ALLOWABLE OVER THE REFERENCES

As demonstrated above, the Risen reference does not teach or suggest the concept of automatically determining claim breadth metrics, and the Examiner now appears to agree [see Office Action of September 15, 2008 at page 4].

Moreover, as the Examiner has admitted, the Snyder reference does not teach claim breadth metrics. [Id.] As Applicants have demonstrated, Petruzzi likewise does not teach automatically determining claim breadth metrics. Petruzzi merely provides a template with which the patent drafter can craft his or her claims (no measurement of claim breadth). Accordingly, it would be improper to combine the Risen, Snyder and Petruzzi references as a teaching of Applicants' invention.

Applicants' claims as they now stand fully distinguish over these references. See Applicants' independent claims:

- Claim 1 recites <u>automatically determining claim breadth metrics</u>.
- Claim 11 recites <u>automatically analyzing the text of the claims in order to</u> generate claim breadth metrics for the claims.
- Claim 31 recites <u>automatically analyzing the text of the claims in order to</u> generate claim breadth metrics for the claims.
- Claim 32 recites <u>automatically analyzing the claim text of said plurality of</u>
 claims to generate and associate an individual claim breadth metric with

each of said plurality of claims.

Accordingly it is respectfully submitted that the claims are now in a condition for allowance.

CONCLUSION

In view of the foregoing, it is respectfully submitted that all claims are allowable over the references of record. Reversal of the Examiner's ruling and allowance of this application is therefore courteously solicited

Respectfully submitted,

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VIII. CLAIMS APPENDIX

 (Currently Amended) A computer-implemented patent portfolio analysis method comprising:

retrieving a corpus of patent information from a database, said patent information including multiple claims from a plurality of patent documents;

automatically determining claim breadth metrics for the multiple claims by using computer to measure claim length:

associating a claim breadth metric with a claim and storing said associated claim breadth metric in a computer-readable dataset,

wherein a claim breadth metric which is associated with a claim is indicative of how broad the claim is.

- 2. (Currently Amended) The method of claim 1 wherein said step of automatically determining claim breadth metrics analyzing the claim text includes automatically counting the number of words in said the claim text for each of said multiple claims and generating a claim breadth metric claim breadth metrics for the multiple claims therefrom.
- 3. (Currently Amended) The method of claim 1 wherein said step of automatically determining claim breadth metrics analyzing the claim text includes automatically identifying within said the claim text for each of said multiple claims a preamble portion and a body portion, counting the number of words in said

preamble and body portions and applying separate weights to said counts to generate said a claim breadth metric for each of said multiple claims.

- 4. (Currently Amended) The method of claim 1 wherein said step ef analyzing the claim text automatically determining claim breadth metrics includes automatically parsing said the claim text for each of said multiple claims to identify parts of speech, using said identified parts of speech to identify clauses within each of said multiple claims claim, comparing said clauses with the text of other claims in said corpus to generate scores indicative of which clauses within said claim text have a lower probability of being found in other claims within said corpus.
- (Original) The method of claim 1 further comprising displaying said patent information in a sorted order based on said claim breadth metric.
- 6. (Currently Amended) The method of claim 1 wherein said step of analyzing the claim text automatically determining claim breadth metrics includes linguistically processing said the claim text for each of said multiple claims to identify at least one clause within said claim text that has a lower probability than other of said clauses within said claim text of being found in other claims within said corpus.

- (Original) The method of claim 6 further comprising displaying said claim text such that said one clause is visually presented differently than the other of said clauses.
- (Withdrawn) A computer-implemented patent portfolio analysis method comprising:

providing user-prescribed categories which were specified by a user; retrieving a corpus of patent information from a database, wherein the patent information is information from multiple patent documents;

analyzing said patent information to generate a category metric corresponding to user-prescribed categories; and

associating said category metric with said patent information and storing said associated metric in a computer-readable dataset.

- 9. (Withdrawn) The method of claim 8 wherein said patent information includes patent classification information and wherein said analyzing step is performed by defining a plurality of categories and mapping classification information onto said categories.
- 10. (Withdrawn) The method of claim 8 wherein said patent information includes claim text information to be analyzed and wherein said analyzing step includes:

defining an eigenspace representing a training population of training claims each training claim having associated training text:

representing at least a portion of said training claims in said eigenspace and associating a predefined category with each training claim in said eigenspace; and

projecting the claim text information to be analyzed into said eigenspace and associating with said projected claim text the predefined category of the training claim to which it is closest within the eigenspace.

 (Currently Amended) A computer-implemented patent portfolio analysis method comprising:

retrieving text of multiple claims from a computer-implemented data store, wherein the text of claims are from a plurality of patent documents;

automatically analyzing said retrieved text to identify the independent claims;

automatically analyzing the text of the <u>independent</u> claims in order to generate claim breadth metrics for the <u>independent</u> claims, wherein a claim breadth metric that is associated with a claim is indicative of how broad the claim is,

wherein the claim breadth metrics are used to analyze the multiple claims.

 (Currently Amended) The method of claim 11 wherein said step of analyzing the claims' text includes <u>automatically</u> counting the number of words in each of the <u>independent</u> claims and generating a numeric claim breadth metric for each claim therefrom.

- 13. (Currently Amended) The method of claim 11 wherein said step of analyzing the claims' text includes <u>automatically</u> identifying within a claim's text a preamble portion and a body portion, counting the number of words in said preamble and body portions and applying separate weights to said counts to generate said claim breadth metric for a claim.
- 14. (Currently Amended) The method of claim 11 wherein said step of analyzing the claims' text includes <u>automatically</u> parsing said text to identify parts of speech, using said identified parts of speech to identify clauses within a claim, comparing said clauses with the text of other claims to generate scores indicative of which clauses within said claim text have a lower probability of being found in other claims within said patent documents.
- 15. (Previously Presented) The method of claim 11 further comprising displaying said patent documents in a sorted order based on said claim breadth metrics.
- 16. (Previously Presented) The method of claim 11 wherein the sorted patent documents are used in a patent infringement study.

- (Previously Presented) The method of claim 11 wherein the sorted patent documents are used to determine patent documents whose maintenance fees are not to be paid.
- 18. (Currently Amended) The method of claim 11 wherein said step of analyzing the claims' text includes <u>automatically</u> linguistically processing said text to identify at least one clause within said claim text that has a lower probability than other of said clauses within said claim text of being found in other claims within said patent documents.
- 19. (Previously Presented) The method of claim 18 further comprising displaying said claims' text such that said one clause is visually presented differently than the other of said clauses.
- (Previously Presented) The method of claim 11 further comprising: generating descriptive statistics based upon the generated claim breadth metrics, wherein the generated descriptive statistics are indicative of quality of claims analyzed.
- 21. (Previously Presented) The method of 20 wherein generated descriptive statistics are generated for groupings of claims.

- 22. (Previously Presented) The method of claim 21 wherein the claim groupings are formed based upon patent ownership, wherein the generated descriptive statistics are statistics selected from the group consisting of average, average of the averages, standard deviation, maximum, minimum, and combinations thereof.
- (Withdrawn) A computer-implemented patent portfolio analysis method comprising:

retrieving patent information from a database, wherein the patent information is from a plurality of patent documents;

analyzing said patent information to generate category metrics; and associating said category metrics with said patent documents and storing said associated metrics in a computer-readable dataset.

wherein said patent information includes claim text information to be analyzed and wherein said analyzing step includes:

defining an eigenspace representing a training population of training claims each training claim having associated training text;

representing at least a portion of said training claims in said eigenspace and associating a predefined category with each training claim in said eigenspace; and

projecting the claim text information to be analyzed into said eigenspace and associating with said projected claim text the predefined category of the training claim to which it is closest within the eigenspace.

24. (Withdrawn) The method of claim 23 wherein said patent information includes patent classification information and wherein said analyzing step is performed by defining a plurality of categories and mapping classification information onto said categories.

25. (Cancelled).

- 26. (Withdrawn) The method of claim 23 wherein said patent information includes using both patent classification information and linguistic analysis results to determine said category metrics to be associated with the patent documents.
- 27. (Withdrawn) The method of claim 26 wherein the category metrics are indicative of technical areas of the patent documents.
- 28. (Withdrawn) The method of claim 23 further comprising: retrieving text of claims from the database, wherein the text of claims are from the plurality of patent documents;

analyzing the text of the claims in order to generate claim breadth metrics for the claims, wherein a claim breadth metric is indicative of claim breadth of a claim.

wherein the claim breadth metrics are used to analyze the claims.

- (Withdrawn) The method of claim 23 wherein values of the category metrics are predetermined.
- 30. (Withdrawn) The method of claim 23 wherein values of the category metrics are dynamically determined.
- (Previously Presented) A computer-implemented patent portfolio analysis apparatus comprising:
 - a database of patent documents containing text of claims;
- a claim breadth analysis module that automatically analyzes the text of the claims in order to generate claim breadth metrics for the claims, wherein a claim breadth metric is indicative of claim breadth of a claim, wherein the claim breadth metrics are provided over an internet network for use in analyzing scope of the claims:
- a cluster generator that analyzes patent information to generate category metrics for the patent documents, wherein clusters of patent documents are determined based upon the generated category metrics, wherein the clusters of patent documents are provided over an internet network for use in analyzing the patent documents.
- (Previously Presented) A computer-implemented patent portfolio analysis method comprising:

retrieving a corpus of patent information from a database, said patent information including the claim text of a plurality of claims;

automatically analyzing the claim text of said plurality of claims to generate and associate an individual claim breadth metric with each of said plurality of claims.

IX. EVIDENCE APPENDIX

None

X. RELATED PROCEEDINGS APPENDIX

None